"Generally, most such heterogeneous systems are active at relatively high temperatures (room to 100° C)". There are also plenty of what I assume to be uncorrected misprints, for example on page 24, "polyaerylonite"; page 39, "a polymer of glucose ($C_8H_{12}O_{6n}$); and page 47, "where π is the constant 3·214". I am reminded of the first draft of a PhD thesis by a student whose native tongue is not English. Such a student is made to rewrite and rewrite; it is a pity the publishers did not demand as much of the author of this book.

Far from being stimulated by this book, those who read it are more likely to be repelled, and what might have been a real service to organic chemistry has a good chance of turning out to be a real disservice. The best one can hope is that this book will quickly be forgotten and that someone else will do what this author has so singularly failed to do.

H. N. Rydon

MORE SNELL AND SNELL

Colorimetric Methods of Analysis

Including Photometric Methods. Vol. 4A. By Foster Dee Snell and Cornelia T. Snell. Pp. ix + 645. (Princeton, N.J.: D. Van Nostrand Company, Inc.; London: D. Van Nostrand Company, Ltd., 1967.) 140s.

Any analyst who has to deal with a wide diversity of samples and finds colorimetric or spectrophotometric methods sufficiently accurate for his purpose is bound to have Snell and Snell within arm's reach of his bench. Others who have occasional need to deal with samples outside the narrow range of daily routine will have Snell and Snell on their library shelves. And it is to Snell and Snell that the analyst will first refer colleagues seeking advice on particular determinations. This work is, in short, the established source for analytical procedures based on colour reactions. Such are the convenience and popularity of spectrophotometric methods that the flow of papers describing new methods or reagents or determinations of new products or of old products in new contexts continues to increase. To keep abreast of the literature is a formidable task indeed, while to make any sort of critical evaluation is wellnigh impossible. Developments in the subject have, of course, meant that some of the material in the four original volumes of this work has been superseded by improved methods or new methods. and advances in science and technology have posed new problems, solutions to which are not to be found in the early volumes of this edition. The heroic feat of updating the second and third volumes has been completed, and is here in part accomplished for the fourth volume. But so extensive is the literature to be covered that it has been found necessary to split the supplementation of this fourth volume into two parts, and volume IVA covers the advances of the past twelve years relevant to the first seven chapters of volume IV, dealing with organic compounds of non-cyclic nitrogen. The six chapters deal with nitrates, nitrites and nitro compounds; aliphatic amines and amides; amino-acids; proteins; aromatic primary, secondary and tertiary amines and amides; and azo compounds, nitrogen containing cycles and other systems. A selection has been made of some 1,383 references for detailed treatment, but many more citations are made in extension.

The treatment is terse and severely practical. General discussion is sharply pointed and principles are stated with the utmost economy. Sample treatment and determination procedure for each compound are given tersely but in full working detail such that a technician, in consultation with an analyst during the initial stages, can work directly from the text. The wealth of information compressed into this volume makes it very good value, and it will be particularly welcomed by clinical, pharmaceutical, agricultural, public health and biochemical

workers as well as by organic chemists in general. Neither praise nor criticism of so compendious a work is viable, one can only admire and return thanks for the industry of the authors and the high standard they have maintained.

E BISHOT

AUTOIMMUNITY

Autoimmunity: Clinical and Experimental

By J. R. Anderson, W. W. Buchanan and R. B. Goudie. (A Monograph in the Bannerstone Division of American Lectures in Living Chemistry.) Pp. xv+485. (Springfield, Illinois; Charles C. Thomas, 1967.) \$19.50.

THE great expansion of interest in all aspects of immunology which has occurred during the last decade has been particularly dramatic in the case of autoimmunity which appeared so paradoxical to the classical immunologist. It would be premature to suggest that this paradox is completely resolved, yet it is obvious that the study of autoimmunity promises to be very fruitful to the immunologist and is also becoming increasingly relevant to clinical medicine. This new book by three of the Glasgow group who have contributed so much to the development of the subject reflects the diversity of the problems as well as the variety of disciplines which autoimmunity encompasses.

Although the subject matter is necessarily similar to that of other recent books on autoimmunity, the organization of the material is somewhat novel. The book is in three sections, the first of which is mainly concerned with the fundamentals of immunology and autoimmunity. The basic concepts and nomenclature of immunology are introduced in a clear and simple way before the experimental and theoretical aspects of autoimmunity and its relation to disease are considered in more detail. Possible mechanisms of autoimmunity are then discussed with particular regard to the role of the thymus.

The correlation of autoimmunity with disease occupies the rest of the book and is divided between the organspecific diseases and the connective tissue diseases. Work on all the immunological aspects of these diseases is thoroughly surveyed and where possible significant correlations are made. The total amount of information is very great, but there is still insufficient evidence to allow firm conclusions to be drawn about the pathogenesis of autoimmune disease. The authors, however, have critically assessed the relevance of the existing evidence and have been able to draw limited conclusions. Further progress has been achieved since this book was prepared, but this does not substantially detract from an excellent survey of the subject presented in a clear and stimulating style. The printing and photographic reproductions are excellent and the twelve hundred references should provide adequate further reading. J. E. FOTHERGILL

INSIDE HYDRA

The Cell Biology of Hydra

By Th. L. Lentz. Pp. xi+199. (Amsterdam: North-Holland Publishing Company, 1966.) 40 guilders; 80s.

This is primarily a research monograph recounting the author's own observations. While these are mainly concerned with the fine structural morphology of hydra, there is material on enzyme histochemistry, nematocyst discharge and the role of the nervous system in regeneration. The author thus does not attempt to provide a balanced review of the cell biology of hydra and he is very uncritical not only of his own work but also of that of others. For example, when dealing with regeneration and growth of hydra, he presents, in the main, only his observations which he suggests point to the presence of a growth stim-